# **Pilot Study States**

August 2010

The Department of Energy's (DOE's) Building Energy Codes Program (BECP) has developed procedures and tools to help states and jurisdictions measure and report compliance with building energy codes (see <a href="State Compliance Evaluation Procedures">State Compliance Evaluation Procedures</a>). BECP and the five national energy efficiency partnerships (EEPs) will be funding eight statewide energy code compliance evaluation pilot studies designed to measure code compliance based on these procedures and tools. The pilot studies are intended to help states in their compliance efforts, while at the same time providing valuable insight into the effectiveness of these tools and suggestions for their improvement. The following nine states will participate in the pilot studies – summaries of planned efforts are provided for each study.

## Iowa

This pilot study will evaluate a sample of 44 new residential buildings. The evaluation will utilize a mix of private third party energy raters, state building inspectors, city and county building inspectors, and investor-owned utility rebate programs.

#### Wisconsin

The Wisconsin Department of Commerce Safety & Buildings Division will evaluate at least 44 buildings from the state's new commercial buildings. For a sampling of buildings in communities where they delegate municipal plan review and/or inspection they will conduct the study as part of their agent auditing process. If possible, X-large and XX-large buildings will be evaluated in addition to the 44 small, medium, and large commercial building evaluations.

### Montana

This study will compare compliance levels in Montana between homes built inside jurisdictions where building officials enforce the code and those built outside jurisdictions (more than 50%) where builders self-certify. A minimum of 50 homes inside the jurisdictions and 50 homes outside will be evaluated.

## Northwest (Washington, Oregon, Idaho, Montana)

On-site interviews will be conducted at jurisdictions in each of the four Northwest states to determine current data collection and storage practices. To determine actual (as opposed to reported) documentation practices, researchers will request to see five residential and five non-residential plan sets and will document the energy code information contained in each plan set. Interviews will be conducted with building code administrative agencies in each state to verify the data collection and plan retention requirements that already exist and ask how the current situation can be improved.

## Northwest (Washington, Oregon, Idaho, Montana)

The Lighting Design Lab (LDL) will look at several building types (office, retail and warehouse) representing a large portion of commercial square footage. Plan submissions will be reviewed for 108 buildings across the Northwest with the goal of identifying consistent problem areas which can be addressed with education, changes to code language or definitions, or both. A minimum of 36 buildings will be field-checked to compare plan submissions to installations. A subset of the 36 buildings will be evaluated using the BECP commercial checklist.

## Georgia

The state will perform initial self-assessments of building code compliance by sending the BECP survey to local jurisdictions and by using BECP guidelines and evaluation checklists to conduct evaluations of 44 commercial buildings. The state intends to contract with a third-party to carry-out the bulk of the inspections, but will also utilize local government inspectors where possible.

#### Utah

Utah will issue an RFP or RFQ for a Utah energy consultant to manage the project as part of the Utah Team. Building departments from three climate zones will establish a baseline of current code compliance using the BECP-developed self-assessment tools, followed by in-field compliance verification. The objective of this task is to collect a sampling of current code compliance rates using BECP's sampling methodology. To understand how the BECP evaluation checklists relate to the Prescriptive, Performance, and Trade-off Approaches, commercial and residential buildings will be selected to participate that include all compliance approaches.

#### Massachusetts

Massachusetts will evaluate at least 44 new residential buildings. The pilot will leverage existing survey work currently in the design phase to provide BECP with the following: 1) feedback on BECP materials, tools, and methodologies, 2) information on the logistics and time involved to evaluate buildings, and 3) data from the evaluation checklists.

#### Indiana

The Indiana Office of Energy Development (OED) posted an RFP for an entity to administer a Building Code Compliance Program for the energy conservation provisions of the Indiana Residential Code and the Indiana Energy Conservation Code. The chosen administrator will create a road map to achieve at least 90% enforcement of both the residential and commercial energy codes by 2017.

# **New Hampshire**

The New Hampshire Office of Energy and Planning issued an RFP for their Building (Energy) Code Compliance Program on September 15, 2009. After a competitive bid and interview process, GDS Associates, Inc was awarded the \$600K contract. The contract includes an Action Plan to obtain 90% compliance with the 2009 IECC by 2018, and includes 24 workshops/trainings, baseline survey work, and other elements.

#### **New York**

Early in 2010 NYSERDA issued an RFP to conduct an assessment of the rate and nature of compliance with the New York State Energy Conservation Code (Energy Code). The contract was awarded to Vermont Energy Investment Corporation (VEIC). The assessment will be a comprehensive, statewide effort to determine how well provisions of the Energy Code are being complied with, in both the commercial and residential construction sectors; to identify areas of non-compliance; to determine methods of verifying compliance; to present the calculation of the overall rate of compliance; and to present recommendations on ways to improve compliance.